a pixel portion including  $\mathbf{m} \times \mathbf{n}$  pixels ( $\mathbf{m}$  and  $\mathbf{n}$  are both natural numbers and satisfy the relation  $\mathbf{m} < \mathbf{n}$ ), said pixels each having a TFT;

a gate driver for feeding **n** gate signal lines with selection signals; a source driver for feeding **m** source signal lines with video data; and a video data converter circuit,

wherein said video data converter circuit converts a video data  $(\mathbf{h}, \mathbf{k})$   $(\mathbf{h} = 1, 2, 3, ..., \mathbf{m} = 1, 2$ 

und.

2. (Amended) A display device comprising:

a pixel portion including  $m \times n$  pixels (in a pixel (h, k), (h = 1, 2, 3, ..., m-1, m) and (k = 1, 2, 3, ..., n-1, n), with m and n both being natural numbers and satisfying the relation m < n), said pixels each having a TFT;

a gate driver for feeding **n** gate signal lines with selection signals; a source driver for feeding **m** source signal lines with video data; and

a video data converter circuit,

wherein said video data converter circuit converts a video data (h, k) (h = 1, 2, 3, ..., m-1, m) and (k = 1, 2, 3, ..., n-1, n) which is to be fed to said pixel (h, k) into another video data, and wherein the video data (h, k) is converted into  $\{m \times (k-1) + h\}$ -th video data.

- 3) A rear projector wherein three display devices according to claim 1 are used.
- 4. A front projector wherein three display devices according to claim 1 are used.
- 5. A rear projector wherein one display device according to claim 1 is used.
- 6. A front projector wherein one display device according to claim 1 is used.
- 7. Electronic equipment comprising a display device according to claim 1 is selected from the group consisting of a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 8. A rear projector wherein three display devices according to claim 2 are used.
  - 9. A front projector wherein three display devices according to claim 2 are used.
  - 10. A rear projector wherein one display device according to claim 2 is used.
  - 11. A front projector wherein one display device according to claim 2 is used.
- 12. Electronic equipment comprising a display device according to claim 2 is selected from the group consisting of a head mount display, a computer, a video camera, a DVD player, and display apparatus.

- (3. A display device according to claim 1 is a liquid crystal display device.
- 14. A display device according to claim 2 is a liquid crystal display device.
- 15. (Amended) A display device comprising:

a pixel portion including  $m \times n$  pixels (m and n are both natural numbers and satisfy the relation m < n), said pixels each having a TFT;

a gate driver for f gate signal lines with selection signals;

a source driver for feeding m source signal lines with video data; and

a video data converter circuit,

wherein said video data converter circuit converts a video data (h, k) h = 1, 2, 3, ..., m-1,m) and (k = 1, 2, 3, ..., n-1, n) into another video data;

wherein the video data  $(\mathbf{h}, \mathbf{k})$  is converted into  $\{\mathbf{m} \times (\mathbf{k} - 1) + \mathbf{h}\}\$ -th video data; and wherein said video data converter circuit has a video formatter, a memory and an address generator.

- 16. Electronic equipment comprising a display device according to claim 15 is selected from the group consisting of a front projector, a rear projector, a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 17. A display device according to claim 15 is a liquid crystal display device.

18.(Amended) A display device comprising:

a pixel portion including  $\mathbf{m} \times \mathbf{n}$  pixels ( $\mathbf{m}$  and  $\mathbf{n}$  are both natural numbers and satisfy the relation  $\mathbf{m} < \mathbf{n}$ ), said pixels each having a TFT;

a gate driver for feeding n gate signal lines with selection signals;

a source driver for feeding m source signal lines with video data; and

a video data converter circuit,

wherein said video data converter circuit converts a video data (h, k) h = 1, 2, 3, ..., m-1,

m) and (k = 1, 2, 3, ..., n-1, n) into another video data,

wherein the video data (h, k) is converted into  $\{m \times (k-1) + h\}$ -th video data,

wherein said gate driver is formed at a lateral side of the pixel portion, and

wherein said source driver is formed at a longitudinal side of the pixel portion.

19. Electronic equipment comprising a display device according to claim 18 is selected from the group consisting of a front projector, a rear projector, a head mount display, a computer, a video camera, a DVD player, and display apparatus.

20. A display device according to claim 18 is a liquid crystal display device.

21. (Amended) A display device comprising:

a pixel portion including  $\mathbf{m} \times \mathbf{n}$  pixels ( $\mathbf{m}$  and  $\mathbf{n}$  are both natural numbers and satisfy the relation  $\mathbf{m} < \mathbf{n}$ ), said pixels each having a TFT;

a gate driver for feeding n gate signal lines with selection signals;

a source driver for feeding m source signal lines with video data; and

a video data converter circuit,

wherein said video data converter circuit converts a video data (h, k) h = 1, 2, 3, ..., m-1,m) and (k = 1, 2, 3, ..., n-1, n) into another video data,

wherein the video data  $(\mathbf{h}, \mathbf{k})$  is converted into  $\{\mathbf{m} \times (\mathbf{k} - 1) + \mathbf{h}\}$ -th video data, and wherein said plurality of gate signal lines are vertical and said plurality of source signal lines are horizontal.

- 22. Electronic equipment comprising a display device according to claim 21 is selected from the group consisting of a front projector, a rear projector, a head mount display, a computer, a video camera, a DVO player, and display apparatus.
  - 23. A display device according to claim 21 is a liquid crystal display device.

## Please add following new claims:

24.(New) A rear projector wherein three display devices according to claim 15 are used.

25. (New A front projector wherein three display devices according to claim 15 are used.

- 26. (New) A rear projector wherein one display device according to claim 15 is used.
- 27. (New) A front projector wherein one display device according to claim 15 is used.
- 28.(New) A rear projector wherein three display devices according to claim 18 are used.

- 29 (New) A front projector wherein three display devices according to claim 18 are used.
- 30. (New) A rear projector wherein one display device according to claim 18 is used.
- 31. (New) A front projector wherein one display device according to claim 18 is used.
- 32.(New) A rear projector wherein three display devices according to claim 21 are used.
- 33. (New) A front projector wherein three display devices according to claim 21 are used.
- 34. (New) A rear projector wherein one display device according to claim 21 is used.
- 35. (New) A front projector wherein one display device according to claim 21 is used.
- 36. (New) A display device comprising:

a pixel portion including  $\mathbf{m} \times \mathbf{n}$  pixels (in a pixel  $(\mathbf{h}, \mathbf{k})$ ,  $\mathbf{h} = 1, 2, 3, ..., \mathbf{m} - 1, \mathbf{m}$ ) and  $(\mathbf{k} = 1, 2, 3, ..., \mathbf{n} - 1, \mathbf{n})$ , with  $\mathbf{m}$  and  $\mathbf{n}$  both being natural numbers and satisfying the relation  $\mathbf{m} < \mathbf{n}$ ), said pixels each having a TFT;

a gate driver for feeding n gate signal lines with selection signals;

a source driver for feeding m source signal lines with video data; and

a video data converter circuit,

wherein said video data converter circuit converts a video data (h, k) (h = 1, 2, 3, ..., m-1, m) and (k = 1, 2, 3, ..., n-1, n) which is to be fed to said pixel (h, k) into another video data,

wherein the video data (h, k) is converted into  $\{m \times (k-1) + h\}$ -th video, and wherein said video data converter circuit has a video formatter, a memory and an address generator.

- 37. (New) A rear projector wherein three display devices according to claim 36 are used.
- 38. (New) A front projector wherein three display devices according to claim 36 are used.
- 39. (New) A tear projector wherein one display device according to claim 36 is used.
- 40. (New) A front projector wherein one display device according to claim 36 is used.
- 41. (New) Electronic equipment comprising a display device according to claim 36 is selected from the group consisting of a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 42. (New) A display device according to claim 36 is a liquid crystal display device.

## **REMARKS**

Applicant will address each of the Examiner's objections and rejections in the order in which they appear in the Office Action.